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TABLE A.4

*Identifications of infecting agents in post-mortem specimens.
(Inclusion in this list does not necessarily indicate that the organisms were the cause of death.)*

		Mammalia	Aves	Reptilia and Amphibia	Total
Bacteria	Cocci	6	4	0	10
	Corynebacterium	1	0	0	1
	Acid fast	5	3	0	8
	Coliforms	12	17	1	30
	Anaerobes	2	0	0	2
	Pseudomonas	2	2	6	10
	Actinomyces	3	0	0	3
	Fungi	0	5	0	5
	Rickettsia and other organisms not specified	1	2	0	3
	Helminths	Cestodes	0	2	0
Nematodes		6	2	9	17
Filaria		2	1	0	3
Protozoa	Flagellates	0	0	2	2
	Amoeba	0	0	1	1
	Coccidia	4	1	0	5
Total		45	40	20	105

TABLE A.5

Analysis of the causes of death amongst unacclimatized animals

	Mammalia	Aves	Reptilia and Amphibia	Total
Inanition	0	2	13	15
Injury, etc.	2	2	0	4
General infections	1	0	0	1
Mycosis	0	1	0	1
Parasitic	2	0	7	9
Alimentary	2	8	0	10
Respiratory	1	6	8	15
Urinary	0	2	0	2
Liver	3	0	0	3
Nervous	0	1	0	1
Metabolism, etc.	4	0	0	4
Skeleton	0	0	1	1
Other causes	4	0	3	7
Total	19	22	32	73

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R. N. T-W-FIENNES

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An account is given of autopsy examinations of Mammalia, Aves and Reptilia during the year 1964. Statistical analyses of results are added in the tables given. Various research problems studied during the year are briefly described.

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General

From March to June, 1964, during my absence from duty on sick leave, the Pathology work was done by Dr Appleby of the Royal Veterinary College and Dr Finlayson of the Royal College of Surgeons. The Society is grateful for the assistance given by these two colleagues at this time.

The results for the year follow the pattern established some years ago when a reduced death-rate was achieved. There were no dangerous episodes though the following are worthy of comment.

*Health of Stock at Regent's Park**Tuberculosis*

Tuberculosis among mammals has steadily declined for some years, and it is now rare to find any case caused by human mycobacteria. A few cases have continued to appear annually associated with bovine-type tuberculosis amongst the artiodactyles and primates. Amongst primates these have been traced to indurated mesenteric glands which were plainly the source of the recrudescence. During the year under review only one case was

Rodentia

23. *Rattus huang*. Huang's rat
Young male (DB 303/64). Duration of stay at Regent's Park four months. Pneumonia.
This rat died as a result of pneumonia associated with infection by *Pseudomonas aeruginosa*.
24. *Rattus huang*. Huang's rat
Adult male (DB 212/64). Duration of stay at Regent's Park two years and four months. Pseudotuberculosis.
The rat died as a result of pneumonia associated with areas of consolidation and miliary white deposits. The condition was shown by culture to be due to pseudotuberculosis.
25. *Dasyprocta aguti*. Orange-rumped agouti
Adult male (DB 61/64). Born in the menagerie—three years and ten months. Pseudotuberculosis.
The liver and spleen were largely composed of necrotic foci and there was considerable anthracosis and congestion in both lungs. *Pasteurella pseudotuberculosis* was recovered in culture.
26. *Dasyprocta aguti*. Orange-rumped agouti
Adult female (DB 219/64). Born in the menagerie—two years and ten months. Pseudotuberculosis.
Numerous abscesses in the liver, spleen and kidneys were ascertained to be due to *Pasteurella pseudotuberculosis*.

Perissodactyla

27. *Diceros bicornis*. Black rhinoceros
Adult female (DB 101/64). Duration of stay at Regent's Park 16½ years.
Mitral stenosis—bronchitis.
This animal, which is known to have been 20 years old, was in good condition. There was excessive fat in the pericardial and perirenal areas. The abdominal and pericardial cavities contained fibrinous exudate. There was long-standing mitral stenosis with thickening of the valves. The right lung showed evidence of bronchitis.
28. *Diceros simus*. White rhinoceros
Female, over nine years old (DB 198/64). Duration of stay at Regent's Park eight years and ten months. Colitis and volvulus.
The female of the pair of White rhinoceroses died suddenly during May with symptoms which in other perissodactyles would be attributed to colic arising from a twisted gut. There was great inflammation of the intestinal mucosa in all areas, and the colon was estimated to contain approximately 20 gallons of fluid.

Artiodactyla

29. *Bison bonasus*. European bison
Young male (DB 177/64). Duration of stay at Regent's Park two months. Pneumonia.
The young European bison was painlessly destroyed because of inability to stand.

The left lung was normal, but the right lung was largely consolidated with grey hepatization indicating that the condition was of at least one week's duration. The bronchioles were filled with pus.

30. *Ammotragus lervia*. Barbary wild sheep
Juvenile female (DB 192/64). Born in the menagerie—one and a half months old. Inhalation pneumonia.
The lamb appears to have died as a result of inhalation pneumonia as a result of regurgitation from an over-distended stomach.
31. *Capra ibex sibirica*. Asiatic ibex
Adult male (DB 134/64). Duration of stay at Regent's Park one and a half years. Brucellosis.
32. *Capra ibex sibirica*. Asiatic ibex
Adult male (DB 135/64). Duration of stay at Regent's Park three months. Brucellosis.
33. *Capra ibex sibirica*. Asiatic ibex
Adult female (DB 169/64). Duration of stay at Regent's Park three and a half months. Brucellosis.
34. *Capra ibex sibirica*. Asiatic ibex
Adult female (DB 203/64). Duration of stay at Regent's Park one year and seven months. Brucellosis.
35. *Capra ibex sibirica*. Asiatic ibex
Adult female (DB 304/64). Duration of stay at Regent's Park one year and ten months. Brucellosis.
36. *Saiga tatarica*. Saiga antelope
Adult female (DB 229/64). Duration of stay at Regent's Park five months. Injury.
This was one of the saigas received from Russia and it died as a result of a broken neck; there were also injuries to the flanks and skull.
- 37 & 38. *Lama glama*. Llama
Adult females (DB 223/64; DB 228/64). Born in the menagerie—11 years and 11 years and 4 months, respectively. Brucellosis.
39. *Lama glama*. Llama
Adult female (DB 294/64). Born in the menagerie—six years and ten months. Vaccine shock.
This llama was negative to brucellosis but succumbed with symptoms of acute shock following injection with entero-toxaemia vaccine.

*Aves**Pelecaniformes*

40. *Pelecanus erythrorhynchos*. American White pelican
Adult male (DB 302/64). Duration of stay at Regent's Park 13 years and 11 months. Internal haemorrhage from a ruptured kidney.